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Lithium and Pregnancy

This sheet talks about the risks that exposure to lithium can have during pregnancy. With each pregnancy, all women have a 3% to 5% chance of having a baby with a birth defect. This information should not take the place of medical care and advice from your health care provider.

What is lithium?

Lithium is a medication used for the long-term treatment of bipolar disorder, which is also called manic-depression. Lithium helps prevent "highs and lows" and therefore, lithium is referred to as a "mood stabilizer." Lithium may also be used to treat other psychiatric and medical conditions. Lithium is sold under many brand name preparations. Some of these include Cibalith-S[®], Eskalith[®], Lithane[®], Lithobid[®] and Lithonate[®].

Should I stop taking lithium before I get pregnant?

No, you should not stop taking lithium without first talking to your health care provider. Your doctor may recommend that you continue taking lithium throughout pregnancy, discontinue it at certain points during pregnancy, or discontinue taking lithium completely during pregnancy. The recommendation will be based on a variety of factors, such as the type and severity of the condition being treated, the likelihood you may relapse without medication, the stage of pregnancy you are in, and other risk/benefit considerations. Stopping lithium abruptly has been associated with relapse of symptoms in individuals with bipolar disorder and is not recommended.

How long should I wait to become pregnant after I have stopped taking lithium?

It takes about 20 hours for half of the drug to be cleared from your body. Studies have shown that the longer an individual has been on lithium, the longer it may take for the body to clear it completely after it has been discontinued. Generally, the lithium that is taken up by your system is cleared from the body over a three to four day period.

Can taking lithium make it more difficult for me to become pregnant?

No. Studies have not shown that taking lithium makes it more difficult for women become pregnant.

Does lithium cause an increased risk for miscarriage?

No increased risk for miscarriage has been reported.

Can taking lithium during pregnancy cause birth defects?

Yes, although not very often. There is an increased chance for heart defects when lithium is used when the heart is forming during the first trimester. One very rare heart defect called Ebstein's anomaly has been seen in addition to other more common types of heart defects. Ebstein's anomaly is the abnormal placement of one of the valves that controls blood flow in the heart. This heart defect can vary from a mild medical problem to a life-threatening problem. Studies have suggested the rate of heart defects with lithium exposure to be in the range of 1-5%. This range is similar to the background rate for heart defects in the general population, 0.5%-1.0%. No other birth defects have been linked to lithium use in pregnancy.

Will taking lithium during pregnancy have an effect on my baby's behavior and development?

Studies on children up to five years of age who were exposed to lithium during pregnancy did not find significant physical, mental, or behavioral problems when compared to children who were not exposed to lithium during pregnancy.

I need to take lithium throughout my entire pregnancy. Are there any concerns with lithium use in the second or third trimester?

Yes. There are case reports of lithium use during pregnancy and the development of a goiter (enlarged thyroid gland in the neck) in the mother. If untreated in the mother, this can lead to a goiter in the baby, a serious problem. The mother's thyroid function should be monitored throughout pregnancy, so she can be treated before the baby develops any problems. In addition, there have been individual reports of reversible thyroid and kidney toxicity in the newborn when lithium was used near delivery. With careful treatment, the baby should fully recover in two to ten days. Because the risk for relapse and postpartum depression is often of great concern, pregnant women who need to take lithium in late pregnancy are not usually weaned off early in the third trimester. Instead, lithium can be stopped 24-48 hours prior to a planned delivery or at the start of labor. Once the baby is delivered, lithium can be restarted at the dosage that was used before the pregnancy began. You should be sure your doctor and your baby's doctor are aware of your lithium use, so the baby is monitored after delivery.

I have been taking lithium since early in my pregnancy. Are there any special tests I can have during pregnancy that can tell me about my baby's health?

Yes. If you were taking lithium during the first ten weeks of pregnancy, it is recommended that you have a level II ultrasound, around the 18th week of pregnancy, to examine the baby's growth and development. It is also recommended that you have a fetal echocardiogram, a special ultrasound of the baby's heart, at 21-22 weeks of pregnancy. These two tests are only used for screening and do not pick up all problems. However, heart defects are the concern with lithium use in pregnancy, and these tests are very good at finding the heart problems which are of most concern. Based on what is seen, your doctor may recommend more follow-up testing.

I will be taking lithium after I deliver the baby. Can I take lithium while breastfeeding?

Lithium passes into the breast milk and is absorbed by the baby. While the amount of lithium found in a nursing baby's blood is less than what is in the mother's blood, there are some reports of adverse effects on the breastfed baby. If a woman takes lithium while breastfeeding, the amount of

lithium in her baby's blood can be measured by a health care provider. Be sure to discuss options concerning breastfeeding with your health care provider.

We are trying to become pregnant, and my partner takes lithium. Will his exposure decrease his fertility or cause birth defects in our children?

One study found that men who were treated with lithium had reduced quality and movement of their sperm. Decreased sex drive was also reported in another study, but this is a common side effect of depression and may not be due to the lithium use. While these effects may make it harder to become pregnant, more studies need to be done in this area before it is known if lithium use in men really decreases fertility. There are no reports in the literature that suggest the use of lithium in men is associated with an increased risk of birth defects.

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References:

- Amsterdam JD, et al. 1981. Psychoneuroendocrinology. (Oxford) 6:359-363.
- Austin MPV and Mitchell PB. 1998. Psychotropic medications in pregnant women: treatment dilemmas. Medical Journal of Australia 169(8):428-431.
- Austin MPV, Mitchell PB. 1998. Use of psychotropic medications in breast-feeding women: acute and prophylactic treatment. Australian and New Zealand Journal of Psychiatry 32(6):778-784.
- Cohen LS and Rosenbaum JF. 1998. Psychotropic drug use during pregnancy: weighing the risks. Journal of Clinical Psychiatry 59(suppl. 2):18-28.
- Cohen LS, et al. 1994. A reevaluation of risk of in utero exposure to lithium. JAMA 271(2):146-150.
- Jacobsen SJ, et al. 1992. Prospective multicentre study of pregnancy outcome after lithium exposure during first trimester. Lancet 339:530-533.
- Llewellyn A, et al. 1998. The use of lithium and management of women with bipolar disorder during pregnancy and lactation. Journal of Clinical Psychiatry 59(suppl. 6):57-64.
- Morrell P, et al. 1983. Lithium toxicity in the neonate. Arch Dis Child 58:539-541.
- Newport DJ, et al. 2005. Lithium placental passage and obstetrical outcome: implications for clinical management during date pregnancy. Am J Psychiatry 162(11):2162-2170.
- Robert E, et al. 1990. Comments on teratogen update on lithium by J. Warkany. Teratology 42:205.
- Schou M. 1990. Lithium treatment during pregnancy, delivery, and lactation: an update. Journal of Clinical Psychiatry 51(10):410-413.
- Viguera AC and Cohen LS. 1998. The course and management of bipolar disorder during pregnancy. Psychopharmacology Bulletin 34(3):339-346.

If you have questions about the information on this fact sheet or other exposures during pregnancy, call OTIS at 1-866-626-6847.